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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/804,050	03/12/2001	James W. Forbes	5699-31	7515

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EXAMINER

OLSON, LARS A

ART UNIT	PAPER NUMBER
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3617

DATE MAILED: 01/30/2002

#4

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/804,050

Applicant(s)

FORBES, JAMES W.

Examiner

Lars A Olson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-48 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 March 2001 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

Specification

1. On line 3 of page 22 of the specification, the word "he" between "In" and "preferred" should be corrected to read "the".
2. On line 22 of page 23 of the specification, the word "outboeard" should be corrected to read "outboard".
3. On line 23 of page 25 of the specification, Figure "29" should be corrected to indicate Figure "2a".
4. On line 9 of Claim 48, the word "thrid" should be corrected to read "third".

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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7. On line 10 of Claim 1, it is claimed "said bulkheads extending to a greater height relative to top of rail than said central beam assembly". It is unclear to the examiner which "rail" the applicant is referring to in the claim, since there is no rail previously mentioned in the claim to provide antecedent basis.
8. On lines 2-3 of Claim 22, it is claimed "lading interfaces each lie at a height greater than 42 inches above top of rail". It is unclear to the examiner to which "rail" the applicant is referring in the claim.
9. On line 2 of Claim 25, it is claimed "said center sill lies at a height greater than 42 inches above top of rail". It is unclear to the examiner to which "rail" the applicant is referring in the claim.
10. Claim 30 recites the limitation "said transition member" in line 1, and "said foothold" in line 3. There is insufficient antecedent basis for these limitations in the claim.
11. On lines 2-4 of Claim 32, it is claimed "said bolster having a upper flange extending in a plane lying at a greater height from top of rail than said draft pocket cap plate". It is unclear to the examiner to which "rail" the applicant is referring in the claim.
12. Claims 36-43 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
13. On line 17 of Claim 36, it is claimed "said bulkhead having at least one shear panel extension member". It is unclear to the examiner what "shear panel extension member" is being

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claimed by the applicant, since the member is not clearly defined in the specification or shown in the provided figures.

14. Claims 44 and 45 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

15. On line 18 of Claim 44, it is claim "a pair of first and second extending to either side". It is unclear to the examiner what pair is being claimed by the applicant. It is assumed by the examiner that the applicant is intending to claim a pair of first and second arms, since arms are claimed on line 19 of the claim.

16. On lines 1-2 of Claim 45, it is claimed "said first bulkhead extends to a second height relative to top of rail". It is unclear to the examiner to which "rail" the applicant is referring in the claim.

Claim Rejections - 35 USC § 103

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. Claims 1-28 and 30-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dominguez et al. (US 4,951,575) in view of Beals (US 5,943,963).

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Dominguez et al. discloses a center beam railroad car, as shown in Figures 1-3, with a deck structure that is carried by trucks, and has first and second end portions and a medial portion between said end portions, where said medial portion is stepped downward relative to said end portions, as shown in Figure 1. Said center beam railroad car also has first and second end bulkheads, as shown in Figures 1, 3 and 11, that extend upwardly from opposite ends of said deck structure, a central beam assembly that runs lengthwise between said bulkheads, stands upwardly of said deck structure, a center sill and a pair of side sills, as shown in Figure 5, a knee that joins a side sill medial portion to each of a pair of side sill end portions, as shown in Figure 11, a draft sill with draft pocket, as shown in Figures 5, 10 and 11, lading securement apparatus, as shown in Figure 11, at least one post that stands upwardly of said deck structure, as shown in Figure 3, and a top chord member that extends between said end bulkheads, as shown in Figures 1 and 3.

Dominguez et al., as set forth above, does not disclose the use of a center beam railroad car that has first and second end bulkheads that extend to a greater height relative to said central beam assembly.

Beals discloses a railroad flat car with a pair of end bulkheads, as shown in Figure 1, that extend to a greater height than a load that is stacked onto the bed of said flat car, as well as any load supports that may be provided on said flat car, such as a central beam assembly.

The use of bulkheads that extend to a height extending beyond AAR Plate C, bulkheads that fall within AAR Plate F, a loading height limit that exceeds the total height of a central beam assembly by at least 33.625 inches, a loading height limit that is within AAR Plate F, a loading

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height that exceeds AAR Plate C, a loading height limit to central beam assembly height ratio that is at least as great as 4:3 or 5:4, a ratio of the loading limit height minus the height of a medial portion that is stepped downward over the total height of a central beam assembly is at least as great as 3:2 or 4:3, a medial portion of a deck structure that is stepped downward by at least 30 or 33.625 inches, bulkheads that exceed the height of a central beam assembly by at least 33.625 inches, a medial deck portion that is at least 28 or 40 feet long, side sills with varying depth of section, side sill portions with varying outboard distance, and a center sill with a depth of section between an upper flange and a lower flange of at least 30 inches, are all design choices based upon the desired load to be carried by a center beam railroad car, and the required size of said railroad car in order for it to be able support the desired load.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to utilize a pair of end bulkheads that extend to a greater height than a central beam assembly, as taught by Beals, in combination with the center beam railroad car as disclosed by Dominguez et al. for the purpose of providing a center beam railroad car that is capable of carrying greater loads.

19. Claims 36-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dominguez et al. in view of Harris et al. (US 4,681,041).

Dominguez et al., as set forth above, discloses all of the features claimed except for the use of a pair of first and second end bulkheads having a bulkhead sheet, a central vertical post and

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transverse beams, and a central beam assembly that includes a shear panel that extends longitudinally inboard of said bulkheads.

Harris et al. discloses a center beam railroad car, as shown in Figure 1, with a pair of first and second end bulkheads, as shown in Figures 2 and 3, that have a bulkhead sheet, a central vertical post that forms a hollow box section, and transverse beams mounted between the webs of said central vertical post, as shown in Figure 3.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to utilize a pair of end bulkheads, as taught by Harris et al., in combination with the center beam railroad car as disclosed by Dominguez et al. for the purpose of providing a center beam railroad car with stronger end bulkheads in order to allow said railroad car to support and carry heavier loads.

20. Claims 42 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dominguez et al. in view of Harris et al., and further in view of Saxton (US 5,758,584).

Dominguez et al. in combination with the teachings of Harris et al. shows all of the features claimed except for the use of a top chord that is mated with an end bulkhead in line with a central vertical post, and an end bulkhead with a cross beam that is mated to a central vertical post at a level that corresponds to said top chord.

Saxton discloses a center beam railroad car, as shown in Figure 1, with an end bulkhead that is mated to a top chord member in line with a central vertical post on said bulkhead, as shown

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in Figure 3, and a cross beam that is mated to said central vertical post at a level that corresponds with said top chord member, as shown in Figure 3.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to utilize end bulkheads, as taught by Saxton, in combination with the center beam railroad car as disclosed by Dominguez et al. and the teachings of Harris et al. for the purpose of providing a center beam railroad car with stronger end bulkheads in order to allow said railroad car to support and carry heavier loads.

21. Claims 44-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dominguez et al. in view of Saxton.

Dominguez et al., as set forth above, discloses all of the features claimed except for the use of a top chord that is mated with an end bulkhead in line with a central vertical post, and an end bulkhead with a cross beam that is mated to a central vertical post at a level that corresponds to said top chord.

Saxton, as previously cited, discloses a center beam railroad car, as shown in Figure 1, with an end bulkhead that is mated to a top chord member in line with a central vertical post on said bulkhead, as shown in Figure 3, and a cross beam that is mated to said central vertical post at a level that corresponds with said top chord member, as shown in Figure 3.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to utilize end bulkheads, as taught by Saxton, in combination with the center beam railroad car as disclosed by Dominguez et al. for the purpose of providing a center beam railroad

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car with stronger end bulkheads in order to allow said railroad car to support and carry heavier loads.

22. Claims 47 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dominguez et al. in view of Saxton, and further in view of Butcher et al. (US 4,802,420).

Dominguez et al. in combination with the teachings of Saxton shows all of the features claimed except for the use of a bolster with gussets mounted between the webs of a center sill in order to provide web continuity through said center sill.

Butcher et al. discloses a center beam railroad car, as shown in Figures 1 and 3, that includes the use of a bolster with gussets mounted between the webs of a center sill, as shown in Figure 3, in order to provide web continuity through said center sill.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to utilize a bolster with gussets, as taught by Butcher et al., in combination with the center beam railroad car as disclosed by Dominguez et al. and the teachings of Saxton for the purpose of providing a center beam railroad car with a stronger undercarriage in order to allow said railroad car to support and carry heavier loads.

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Allowable Subject Matter

23. Claim 29 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The prior art does not show or suggest the use of a medial portion of a railroad car deck structure that is connected to an end portion of said deck structure by a transition member that includes a foothold to facilitate ascent of said end portion from said medial portion of said deck structure.

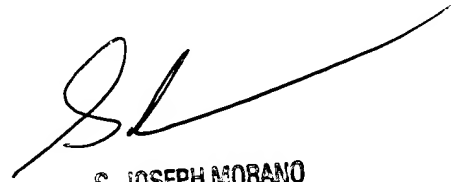
Conclusion

24. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

25. Any inquiry concerning this communication from the examiner should be directed to Exr. Lars Olson whose telephone number is (703) 308-9807.

lo

January 23, 2002


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